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THE UNIVERSITY OF IOWA
Utilities and Energy Management

February 13, 2014

Lisa Hanlon
U.S. EPA Region 7
Air Permitting and Compliance
11201 Renner Blvd.
Lenexa, KS 66219

Subject: University of Iowa Boiler MACT Compliance Plan for Hurst Boiler (Plant # 52-01-005, Permit # 78-A-023-S7)

Dear Ms. Hanlon:

As discussed in my September 6, 2013 letter, the Hurst Boiler was not able to demonstrate compliance with the NESHAP Subpart DDDDD requirements for this unit while burning wood chips. This unit is classified as a new, "stoker/sloped grate/others designed to burn wet biomass fuel." Specifically, the particulate matter limit of 0.03 lb/mmbtu limit could not be achieved when the unit was tested on July 23, and 24 of 2013. Since that time, the unit has been operated on natural gas only.

An internal inspection of the Tri-Mer filter, that is used for particulate matter and NOx control, revealed that several of the ceramic filters inside the unit were cracked, allowing particulate emissions to pass through. The filters that were found to be cracked have now been replaced, or in some cases, removed and blanked off. Having made this repair we would like to again do a wood chip stack test to demonstrate compliance with the Boiler NESHAP rules.

With this letter we are seeking permission to operate the boiler on wood chips for a period of one to two months prior to stack testing, for troubleshooting purposes. During this time we will monitor differential pressure across the Tri-Mer filter, ensure that the urea SCR system is operating properly, experiment with different boiler loads, and ensure that the fuel handling system can be kept online on a continuous basis. When we feel the boiler is operating smoothly and consistently, we will bring in a stack testing company to do the compliance demonstration for all of the relevant Boiler NESHAP pollutants. Due to the plugging problems we have experienced with the Tri-Mer control device, we will not be able to operate the boiler at its full load of 20,000 lbs/hour. Boiler fan operating constraints will likely limit steam production to around 10,000 lbs/hour, but the stack testing will be carried out at the maximum rate we can achieve.

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With your approval, we would like to begin the boiler testing and troubleshooting period on April 1, 2014, and then plan to complete the compliance stack testing by June 20, 2014.

Please contact me at 319-335-6185, or at mark-maxwell@uiowa.edu with any questions or concerns regarding this proposed compliance plan and I will make adjustments as necessary.

Sincerely,

Mark Maxwell

Mark W. Maxwell
Environmental Engineer

cc: Scott Postma, QSTO 1, 2, 3
Region VII, EPA
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Kansas City, KS 66101

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